

VIRGIN RIVER BASIN

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09409100 SANTA CLARA RIVER ABOVE BAKER RESERVOIR, NEAR CENTRAL, UT

LOCATION.--Lat 37°23'05", long 113°37'52", in SW^{1/4}NW^{1/4}NE^{1/4} sec. 22, T. 39 S., R. 16 W., Washington County, Hydrologic Unit 15010008, on left bank 0.6 mi downstream from Kane Spring Draw, 0.8 mi upstream from Baker Dam, 2.6 mi south of Central and 4.0 mi north of Veyo.

DRAINAGE AREA.--116 mi².

PERIOD OF RECORD.--October 1989 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,875 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except for daily discharges less than 2.0 ft³/s, which are poor. Diversion 0.5 mi upstream for power generation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,160 ft³/s (estimated), Mar 11, 1995, gage height, 5.79 ft, from rating curve extended above 100 ft³/s on basis of slope-area measurement at gage height, 2.28 ft and velocity-area measurement at gage height, 2.78 ft; minimum daily discharge, 0.08 ft³/s, Aug 9-14, 2002 and Aug 10, 11, 2003.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec 6, 1966 reached a discharge of 2,080 ft³/s, from flow over dam measurement.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 18 ft³/s, May 19, gage height, 1.23 ft; minimum daily discharge, 0.08 ft³/s, Aug 10, 11.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.1	4.9	6.3	6.2	0.28	0.30	0.28	0.38	0.27	0.16	0.12	0.09
2	5.2	5.7	6.2	6.2	0.28	0.30	0.28	0.30	0.21	0.16	0.13	0.10
3	5.3	6.0	6.2	6.2	0.29	0.30	0.28	0.30	0.19	0.16	0.12	0.11
4	5.2	6.0	6.2	6.2	0.30	0.30	0.29	0.49	0.18	0.17	0.11	0.11
5	4.9	6.2	6.2	6.4	0.30	0.30	0.30	0.34	0.18	0.16	0.10	0.12
6	4.8	6.0	6.2	6.5	0.30	0.30	0.29	0.29	2.3	0.16	0.10	0.13
7	4.8	6.0	6.2	6.5	0.30	0.30	0.29	0.30	4.5	0.16	0.10	0.19
8	4.7	6.4	6.2	6.6	0.30	0.30	0.29	0.29	4.6	0.16	0.09	0.23
9	4.7	6.8	6.4	6.6	0.30	0.30	0.30	0.28	4.6	0.15	0.09	0.33
10	4.7	6.6	6.5	6.5	0.30	0.30	0.30	0.28	4.5	0.14	0.08	0.40
11	4.5	6.5	6.2	6.7	0.30	0.30	0.30	0.28	4.6	0.13	0.08	0.47
12	4.5	6.5	6.2	6.5	0.30	0.30	0.30	0.27	4.6	0.13	0.09	0.52
13	4.6	6.5	6.2	6.4	0.34	0.30	0.30	0.27	4.5	0.13	0.09	0.61
14	4.6	6.5	6.1	6.3	0.37	0.30	0.30	0.28	4.5	0.12	0.09	0.73
15	4.7	6.5	6.0	6.3	0.35	0.30	0.52	1.00	5.2	0.12	0.10	0.89
16	4.7	6.5	6.1	4.5	0.30	0.60	0.66	2.1	4.8	0.13	0.12	0.64
17	4.8	6.5	6.5	1.8	0.30	0.74	0.40	4.8	4.8	0.14	0.10	0.14
18	4.9	6.3	6.5	0.28	0.30	0.44	0.37	4.2	2.9	0.14	0.09	0.14
19	4.9	6.2	6.5	0.28	0.30	0.40	0.32	9.9	0.13	0.13	0.10	0.15
20	4.9	6.2	6.5	0.28	0.30	0.40	0.30	5.8	0.13	0.13	0.10	0.14
21	4.9	6.2	6.5	0.28	0.30	0.37	0.30	0.71	0.14	0.12	0.10	0.13
22	5.0	6.2	6.6	0.28	0.30	0.35	0.31	0.50	0.15	0.11	0.12	0.13
23	5.1	6.2	6.7	0.28	0.30	0.32	0.31	0.52	0.16	0.12	0.12	0.14
24	5.0	6.2	6.6	0.28	0.29	0.32	0.30	0.73	0.17	0.13	0.10	0.17
25	5.0	6.2	6.2	0.28	0.30	0.37	0.30	0.62	0.16	0.14	0.09	0.21
26	5.1	6.2	6.2	0.28	0.30	0.31	0.30	0.63	0.16	0.13	0.10	0.26
27	5.2	6.2	6.2	0.28	0.30	0.29	0.30	0.59	0.15	0.12	0.10	0.39
28	5.2	6.2	6.2	0.28	0.30	0.30	0.47	0.70	0.15	0.11	0.10	0.53
29	4.9	6.2	6.2	0.28	---	0.29	0.69	0.74	0.15	0.11	0.10	0.73
30	4.8	6.2	6.2	0.28	---	0.28	0.41	0.44	0.16	0.12	0.09	0.88
31	4.7	---	6.2	0.28	---	0.28	---	0.36	---	0.13	0.09	---
TOTAL	151.4	186.8	195.2	106.32	8.50	10.56	10.36	38.69	59.24	4.22	3.11	9.81
MEAN	4.88	6.23	6.30	3.43	0.30	0.34	0.35	1.25	1.97	0.14	0.10	0.33
MAX	5.3	6.8	6.7	6.7	0.37	0.74	0.69	9.9	5.2	0.17	0.13	0.89
MIN	4.5	4.9	6.0	0.28	0.28	0.28	0.28	0.27	0.13	0.11	0.08	0.09
AC-FT	300	371	387	211	17	21	21	77	118	8.4	6.2	19

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2003, BY WATER YEAR (WY)

MEAN	2.94	3.95	3.42	2.73	2.91	10.5	9.23	19.8	16.4	5.90	2.48	3.73
(WY)	(1996)	(1996)	(1993)	(1993)	(1993)	(1995)	(1993)	(1993)	(1995)	(1995)	(1995)	(1995)
MAX	14.6	12.9	10.6	12.9	11.8	63.7	35.1	77.8	84.1	32.1	7.36	15.5
(WY)	(2002)	(1990)	(1990)	(2000)	(2003)	(2002)	(2003)	(1990)	(2002)	(2002)	(2003)	(2001)
MIN	0.31	0.50	0.40	0.47	0.30	0.31	0.35	0.47	0.16	0.11	0.10	0.23

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SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR	FOR 2003 WATER YEAR	WATER YEARS 1990 - 2003
ANNUAL TOTAL	1,027.38	784.21	
ANNUAL MEAN	2.81	2.15	7.02
HIGHEST ANNUAL MEAN			24.5
LOWEST ANNUAL MEAN			1.39
HIGHEST DAILY MEAN	7.3	Apr 26	393 Mar 11, 1995
LOWEST DAILY MEAN	0.08	Aug 9	0.08 Aug 9, 2002
ANNUAL SEVEN-DAY MINIMUM	0.08	Aug 8	0.08 Aug 8, 2002
ANNUAL RUNOFF (AC-FT)	2,040	1,560	5,080
10 PERCENT EXCEEDS	6.3	6.2	17
50 PERCENT EXCEEDS	0.55	0.30	1.2
90 PERCENT EXCEEDS	0.12	0.12	0.30

